

REMARKS

The present amendment is in response to the Office Action dated September 26, 2005, where the Examiner rejected claims 1-50 on 103(a) grounds.

A. Priority

Applicant disagrees with the Examiner's comments about the priority claimed in this patent application. However, to expedite the prosecution of this patent application, the Applicant has decided to provide only limited comment to preserve the record for further discussion. Thus, the Applicant reserves the right to comment at a later time, and the following paragraph refers to only portions of text that refute the Examiner's conclusion that there is no reference to claimed subject matter.

In particular, the Applicant respectfully submits that the Examiner has elected to apply an overly conservative reading of the Applicant's terminology, namely, buffering video, data, and voice signals in connection with a common shared bus. The 09/162,313 application provides support for the buffering of video, data, and voice signals in *inter alia* FIG. 6 and on Page 14: line 8 through Page 15: line 12. The combiner 89 and encoders 11, 51-58 provide the buffering. See Page 10: line 30 through Page 11: line 14 for reference to "store and retransmit" and "random access memory." The common shared bus is located between the encoders 51 – 58 and the diplexor 77, on Page 9: line 26 through Page 10: line 29.

Therefore, Applicant contends sufficient support is provided in the parent patent application for the claims in this CIP. Since adequate support is provided in the 09/162,313 patent application cited by the Applicant, the Massucci '667 reference is an improper reference that can not be cited to for purposes of a 102 or 103 rejection, because

the Applicant's filing date of 9/28/98 precedes the filing date of Massucci '667, which is 9/10/99.

B. Drawings

The Examiner has identified informalities in his Office Action. The informalities have been corrected as described below.

For FIG. 2, a replacement paragraph has been provided that corrects the inadvertent numbering mistake that was made by the Applicant.

For FIG. 4 and FIG. 5, replacement drawings are submitted herewith to correct the inadvertent mistake regarding the Smart NIM and Smart NIW.

For reference number 66, a replacement paragraph has been provided.

For reference number 140, a replacement paragraph has been provided, and a replacement FIG. 4 has been amended to include a new reference number 141.

For reference numbers 120 and 122 at Page 13, line 13, a replacement paragraph has been provided and a replacement FIG. 3 with new reference numbers 96 and 98.

No new matter has been added.

C. Specification

As per the Examiner's request, the Abstract has been amended.

The Specification has been corrected to properly identify NOC 102 with a number of replacement paragraphs.

The Specification has been corrected to properly identify the downstream combiner 172.

D. Claim Rejections – 35 USC § 112

The Applicant appreciates the Examiner's interpretation that claim 14 depends on claim 10, and the appropriate correction has been made to claim 14.

E. Claim Objections

The Examiner rejected claims 20, 21, 25, 45, 46 and 29 because the phrase "said plurality of voice information" lacked proper antecedent basis. The Applicant has amended the claims to provide proper antecedent basis consistent with the Examiner's interpretation.

The Examiner has identified claims 10 and 35 as lacking proper antecedent basis. These dependent claims and their corresponding independent claims have been amended to overcome the Examiner's objection.

E. Claim Rejections – 35 USC § 103

The Examiner has rejected all claims based on Applicant's admitted prior art (APA), Sherlock (US Pat No. 6,882,709), and Masucci (US Pat No. 6,498,667).

Firstly, the Examiner has misread Applicant's APA in view of the Applicant's claims. The Applicant's claims and specification are directed to a *single integrated* digital headend. The Applicant's APA teaches a variety of components that are not modular and that are not easily integrated (see Page 1-7 of Applicant's Patent Application). To clarify this distinction the Applicant has amended each of the independent claims 1, 15, 26, and 40 to reflect the additional limitation of a single integrated digital headend.

With respect to Sherlock '709, Applicant respectfully concedes that Sherlock describes a set top box. Applicant also respectfully submits that the Examiner may be interpreting the Applicant's use of the term "set-top box" too restrictively. In this case, the "set top box" is simply a device that is configured to communicate with the single integrated digital headend.

With respect to Applicant's "network interface module" and "shared bus" claim language, the Examiner states the APA is silent on such usage. The Examiner then relies on Masucci '667 to support the contention that the network interface module and shared bus are housed within the digital headend. It appears the Examiner has interpreted the Masucci '667 passive optical network (PON) 16 as reading on Applicant's "common shared bus." The PON 16 in Masucci '667 is intended to permit communication between a central terminal and plural remote terminals. See Masucci '667 at col.1: line 30 -60. Here, the common shared bus is located at the digital headend and does not extend to the customer premises. In Masucci '667 the remote terminal 14 is located at a customer premises, and formats packet and/or circuit traffic for transport over the PON 16. See Masucci '667 at col. 1: line 30-31 and col. 1: line 65-66. There are additional inconsistencies in FIG. 2 of Masucci '667 that relate to the existence of Applicant's network interface module. Quite simply the Applicant does not see where in Masucci '667 a shared bus is taught and a network interface module as claimed by Applicant. For purposes of properly prosecuting this patent application, further detail is sought about what is Masucci '667 is directed to Applicant's network interface module and Applicant's shared bus housed within a digital headend.

With respect to claims 3, 17, 28, 42, 4, 18, 29, 43, 5, 19, 30, 44, 6, 7, 8, 31, 32, 33, the Examiner relies on the Applicant's admitted prior art (APA) and continuously refers

to Applicant's smart network interface module, which is not taught in Applicant's APA. Additionally, the Applicant respectfully submits the smart network interface module is not taught by Masucci '667 as described above.

With respect to claims 9, 20, 34 and 45, the Examiner refers to Masucci '667 at Col. 5:54-56, which states "It should be understood that alternative embodiments can use priority queues to prioritize traffic." Applicant teaches a particular system for optimizing communications that comprises, a network interface module, a shared bus, a downstream module, and up stream module, and a shared bus that are within a digital headend. Applicant does not see how a veiled reference to prioritizing traffic can be related to "optimizing" communications in Applicant's system in view of Masucci '667 not teaching smart network interface module and shared bus housed by a single digital headend.

With respect to claims 10, 21, 35, and 46, the Applicant assumes the reference number 110 and 106 refer to FIG. 2 in Masucci '667. The Masucci '667 reference numbers 106 and 110 refer to queue block 106 and 110. See Col. 4: line 8-9. The precise function or operation of 106 and 110 is not described with any additional particularity other than as a "queue block." As stated in Section 2143 of the MPEP:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art references (or references when combined) must teach or suggest all the claim limitations.

Applicant does not see how a "queue blocks 106 and 110" can be viewed as teaching or suggesting Applicant's claim limitations as they relate to a smart network interface module that is operatively coupled to a shared bus that is coupled to a downstream

module. Masucci '667 teaches a POS that is operatively coupled to remote terminal, then cell processing, and followed by communications back to the remote terminal. The Masucci '667 POS is similar to Applicant's distribution system 116.

With respect to claims 11-14, 22-25, 36-39, and 47-50, the Examiner argues that the use of control information is "necessary" to process data. However, the Examiner fails to provide any support in the prior art that teaches the use of this control information. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in the applicant's disclosure. Section 2143, MPEP Rev. 2.0, May 2004, pg. 2100-129. Here, the Examiner has not provided any prior art, or identified ordinary skill in the art as a basis for making the rejection.

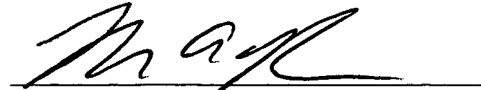
The Examiner then continues by rejecting claims 1-50 and relies substantially on Hirasawa '075. Hirasawa '075 is directed to multiple computers in a local area network. Here, the smart network interface modules and shared bus are housed with a single digital headed. The Applicant has amended the independent claims to clearly identify that a single integrated headed system is claimed. Quite simply, neither Hirasawa '075, Applicant's APA, Sherlock, or the combination thereof teach a single integrated headend configured to process voice, video, and data using a common shared bus that is operatively coupled to a downstream module, and having smart network interface modules operatively coupled to the shared bus.

F. Conclusion

For all the foregoing reasons, allowance of claims 1-50 pending in the present application is respectfully requested.

Respectfully Submitted;

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A handwritten signature in black ink, appearing to read 'M A Kerr', is written over a horizontal line.

Michael A. Kerr
Patent Attorney
Reg. No. 42,722

Michael A. Kerr
VIRTUAL LEGAL, P.C.
3476 Executive Pointe Way, Ste. 16
Carson City, NV 89706
Tel: (775) 841-3388
Fax: (775) 841-3389